



US Army Corps
of Engineers
Detroit District

Great Lakes Update

“Tall Ships” on the Great Lakes

The Great Lakes offer many wonderful views, but none as grand as those graced with the majesty and beauty of large sailing ships plying the waters of the open lakes, its interconnecting rivers and its harbors. This summer will long be remembered by many for the “2001 Great Lakes Tall Ship Challenge.”

From June through August, at least 26 “Tall Ships” will grace the lakes, its connecting waterways and key ports. These ships will range in size from the 50-foot *St. Paul*, to several 70-80-foot sloops, to the 92-foot replica of Columbus’ *Nina*, and onto the bigger schooners and brigantines including the Bahamian *Concordia* at 188-foot long, the *Pride of Baltimore II* at 170-foot long and the majestic *USS Niagara* at 198-foot long.

The 2001 Great Lakes Tall Ships Challenge will include special events in Kingston, Port Colborne, Cleveland, Detroit-Windsor, Bay City and Muskegon. Many of the sailing vessels will make other stops along the way or on their return voyages at Toronto, Oswego, Buffalo, Toledo, Sarnia, Penetanguishene, Mackinaw Island, Milwaukee and Chicago and other ports across the region. One special event during this trip will be the gathering of tall ships at Detroit, Michigan to help the city celebrate its 300th birthday.



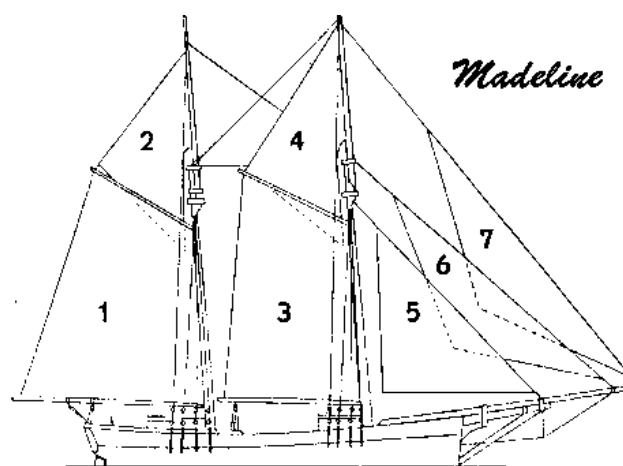
Sailing Vessel Concordia

Types of Sailing Craft

Sailing craft on the Great Lakes as defined here include all manner of large commercial ships (more than 50 feet in length) propelled by sail, regardless of rig. Sailing vessels are generally classified according to rigging (i.e., number of masts and shape of the sails). These include sloops, schooners, brigs and brigantines, barkentines, and unpowered consort-barges. Many of the nautical terms provided below are highly technical. For detailed descriptions of these technical terms and much other valuable nautical information, the reader is referred to the book: *Piloting, Seamanship and Small Boat Handling* by Charles F. Chapman. It can be found in most public libraries.

Sloops are vessels with single masts containing a gaff mainsail and headsails. They were some of the earliest vessels on the Great Lakes, but were not used extensively for commercial purposes.

Schooners were initially two-masted vessels that had one or two square sails on the foremast and a gaff topsail on the main mast. Later schooners had three and even four masts. Schooners were an early vessel type on the Great Lakes and soon became the most popular vessel type, a popularity that was to last throughout the age of commercial sailing on the Great Lakes. They could use a longer and narrower hull than a sloop and were thus faster yet had good cargo capacity. The 92-foot *Madeline*, participating in the Tall Ships Challenge, is a replica of a typical mid-19th century Great Lakes schooner.



- | | |
|--------------|------------------|
| 1. Main Sail | 2. Main Top Sail |
| 3. Fore Sail | 4. Fore Top Sail |
| 5. Stay Sail | 6. Inner Jib |
| 7. Outer Jib | |

Brigs/brigantines are two-masted vessels with square sails on the foremast and a gaff sail with a boom on the mainmast. Most lake brigs contained staysails and jibs on the mainmast in addition to the square sails and staysails on the main mast with the gaff-top spanker.

Barkentines, Barquentines, or Barques are three-masted vessels with square sails on the foremast and gaff sails on the main mast and the mizzen mast. The foremast sails usually

consisted of a square foresail, topsail, topgallant sail, and one royal.

Consort-barges, classified as commercial sailing vessels are either sailing vessels converted to barges or those built as barges containing masts. Most consort-barges were rigged as schooners.

The diversity of sailing craft on the Great Lakes speaks volumes about the variety of marine conditions present throughout these complex waterways. It also tells a lot about the diversity of shipbuilding technologies, maritime activities and shipboard cultures that occurred over our history on the lakes.

Strictly defined, Tall Ships are “full-rigged ships,” none of which will be participating in the 2001 Great Lakes Tall Ships Challenge. “Square rig”, the basic form of mast and sails used on a full-rigged ship, is ill-suited for travel on the Great Lakes and were not often seen on the lakes. The need to navigate narrow and curving channels in the Detroit and St. Marys River, under a variety of wind conditions, was very difficult for a square rig, which are better suited for long runs on the open oceans. So schooners, much more adaptable under Great Lakes conditions, became the norm.



History of Sail on the Great Lakes

Human history on the Great Lakes was largely affected by the size, shapes and diversity of sailing craft. Native American communities were highly reliant upon canoes in various sizes and shapes until they were confronted by the cultural invasion of the Western European powers of England and France.

Initial exploration of the Canadian Maritimes by John Cabot and his son Sebastian in the late 15th and early 16th centuries was followed by Jacques Cartier's exploration of the St. Lawrence Valley in 1534-35. The explorer and colonizer Samuel de Champlain derived most of the European definition of the Great Lakes as early as 1610, pieced together by accounts of Native Americans. Further explorations included those of the Jesuit missionaries of New France such as Father Marquette and Bishop Baraga. All of these explorations relied upon sail craft and other small craft of the day.

The fur trade flourished across the region for most of the 17th and 18th centuries. Many trapping grounds were as far as 1,500 miles west of Grand Portage, Minnesota where trappers bartered their goods to the "Voyageurs." The voyageurs carried these pelts in large canoes across Lake Superior, the St. Marys River, and Georgian Bay to the Nipissing River and down the Ottawa River to Montreal. The fur trade from the Great Lakes and points west was a thriving source of commerce from the new world to Europe. Commerce with Europe was all conducted using sailing vessels of the day.

The western migration from the Atlantic coastal states in the mid-1800s relied heavily on the development of the Erie Barge Canal to transport goods and people to the great western reaches of the continent; these being Ohio, Michigan, Wisconsin and Illinois. Sailing vessels regularly took passengers and cargoes to and from Tonawanda, New York, the western terminus of the Erie Barge Canal near Buffalo, to points west such as Detroit and Chicago.

Schooners were a working element of trade on the lakes for much of the 18th and 19th centuries. They were cheap to build, using readily available timber and requiring no expensive machinery and boilers. They took relatively small crews who worked unbearable hours and the price for fuel was acceptable, being free on the wind. They carried timber and farm products primarily.

The use of commercial sailing craft on the Great Lakes decreased sharply in the late 19th century with the introduction of steam power, propellers, and metal hulls. By 1920, all commercial schooners were replaced by steamships, primarily for hauling iron ore from Lake Superior to the steel mills on the lower lakes. The steel-hulled steam-driven vessels provided the transport necessary to transform the Great Lakes basin into the center of industry for both the U.S. and Canada.

The War of 1812

The heyday of the majestic sailing ships on the Great Lakes most assuredly was during the War of 1812. The original brig *U.S.S. Niagara* played a critical role in the history of the Great Lakes. In many respects the fledgling new nation of the United States was engaged in a battle for its life against the British who owned the world's premier navy. The biggest confrontation of the war occurred during the Battle of Lake Erie, fought on September 10, 1813.



The American forces on Lake Erie were led by Master Commandant Oliver Hazard Perry whose fleet of nine warships was based in Erie, Pennsylvania. Among the fleet were the newly built sister brigs *U.S.S. Lawrence* and *U.S.S. Niagara*. The British fleet under the command of one-armed Commander Robert Barclay was based at Amherstburg, Ontario at the southern end of the Detroit River. Although the British

flotilla of six ships was beset with problems including being undermanned, short on provisions and cannon, and suspect seamanship. Commander Barclay was convinced that his fleet would give good account against the Americans.

Perry assembled his ships at Put-in-Bay on South Bass Island, part of a chain of islands in western Lake Erie, and awaited the British. After battle was joined, the Americans took a terrible beating, and Perry's flagship, *U.S.S. Lawrence*, was reduced to a floating hulk. Perry courageously transferred his battle flag and a few men in a small ship to the sister brig *Niagara* to continue the fight. The tide turned with the *Niagara* inflicting heavy damage to three of Barclay's warships and the British were defeated. On a back of an envelope, Perry wrote a message to his superiors, "We have met the enemy and they are ours."

Perry's victory ended any British chance to dominate the upper Great Lakes. The American victory over the world-dominate British Navy was exactly what the new republic needed for its self-image and national pride.

After the war, Perry's fleet retired at Erie and the *Lawrence* and *Niagara* were sunk there in Misery Bay. The remains of the *Lawrence* were raised in 1876 and sent to Philadelphia to be exhibited in a special pavilion for the centennial celebrations. Sometime later the pavilion burned and the *Lawrence* was burned with it.

In 1913, the remains of the *Niagara* were raised and the vessel was reconstructed. It was towed from port to port around the Great Lakes by the *U.S.S. Wolverine*, a sidewheel gunboat built at Erie in 1848, which was the first iron ship in the U.S. Navy. This historic pairing was doubly significant as it showcased the waning days of the sailing navy and the onset of the steam-powered navy. The *Niagara* led a less than stellar life, mostly out of water in Erie, Pennsylvania up until 1988 when she was restored and returned to the water as a training ship. Regardless of whether she is a replica or a

restoration, her involvement in the 2001 Great Lakes Tall Ships Challenge is a celebration of the history of the region.

"Tall Ships" Who Call the Great Lakes "Home"

The *Appledore IV* is a traditional Great Lakes schooner, built in 1989 and operated by the non-profit organization BaySail out of Bay City, Michigan, to foster environmental stewardship of the Saginaw Bay watershed and the Great Lakes ecosystem.

The *Denis Sullivan* is a recreation of the traditional Great Lakes schooner, which can be likened to the semi-trailer trucks of the 20th century. It was launched in 2000 in Milwaukee, Wisconsin, being the first ship of its type built in that state in over a century. She is operated by the Wisconsin Lake Schooner Education Association, to promote awareness of Great Lakes ecosystem and environmental concerns.



Denis Sullivan

The *Fair Jeanne* is a 110-foot brigantine built in a backyard along the Ottawa River between 1979 and 1982 by a late Ottawa construction magnate. She is now operated by Bytown Brigantine, a non-profit, charitable organization dedicated to providing adventure experiences at sea.

The *Inland Seas* is based in Suttons Bay, Michigan. It is operated by the Inland Seas Education Association, a non-profit organization whose mission is to enhance stewardship of the natural resources of the Great Lakes.

The replica Great Lakes commercial schooner *Madeline* was built in Traverse City, Michigan and launched in 1990 by the Maritime Heritage Alliance, a non-profit organization promoting maritime history and traditional sailing craft.

The Traverse Tall Ship Company operates the Schooners *Manitou* (114-foot) out of Northport, Michigan for multi-day cruises and *Westwind* (66-foot) out of Traverse City, Michigan for single day adventures.

The sailing vessel *Mist of Avalon* is based out of Ivy Lea, Ontario. This converted fully rigged vessel is a true replica of the 19th century Grand Banks schooners. She is used for both charters and for sail training.

The schooner *Red Witch*, based out of Port Clinton, Ohio was built expressly for chartering, including excursions from Cleveland, Toledo, Port Clinton, Sandusky, Huron, Lorain and Mentor, Ohio and from Erie, Pennsylvania.



Red Witch

The sailing vessel *St. Lawrence II* was built in 1953 at the Kingston Shipyards. It is operated by a non-profit organization from Kingston, Ontario for extensive youth sail training.

Lake Huron's Georgian Bay is graced with Ontario's leading marine heritage site, Discovery Harbour. Discovery Harbour is the home port of the magnificent ships *H.M.S. Tecumseth* (124 foot) and *H.M.S. Bee* (79 foot). These ships are full-scale active replicas of the original Royal Navy vessels that were stationed at the base in the early 19th century. Discovery Harbour traces its roots back to the original Penetanguishene British naval and military base built as a result of the War of 1812 to safeguard access to Upper Canada. The base was an important strategic location to keep ships in a state of readiness and to supply British posts to the northwest.



Tecumseth

Toronto is home to the *True North*, a two-masted topsail schooner used for sail training.

Tall Ships Participating in the Great Lakes Challenge 2001

Amara Zee – U.S. - 90' long - ketch used as a theatre ship; operated by the Caravan Stage Society to create awareness of ecologically sustainable working and playing environments.

Appledore IV – U.S. – 85' long – see above.

Bat'kivshchnya – Ukraine – 97' long – This steel-hull Soviet-era fishing boat was completely refurbished in 1991. She is on tour to increase opportunities for commerce and trade with the Ukraine. The ship is also seeking contributions for the Children of Chernobyl Relief Fund.

Bel Espoir II – France – 114' long; built in 1944 as a 3-masted gaff schooner to carry livestock.

Blue Nose II – Canada – 161' long – built in 1921 as a replica of the original sleek and fast racing vessels on the North Atlantic; a symbol of pride of Canadian shipbuilding and sailing skills.

Cape Rose (aka ***Danielle Louise***) – U.S. – 72' long – built in the late 1980s in South Africa, this sailing vessel is now used as a passenger ship for day and overnight educational adventures.

Concordia – Bahamas – 188' long – built in 1869 as a 3-masted iron barkentine, operated by the West Island College for maritime training.

Denis Sullivan – U.S. – 130' long - see above.

Fair Jeanne – Canada – 110' long – see above.

Grand Nellie – U.S. – 75' long – operated as a sail-training vessel.

Highlander Sea – Canada – 154' long – built in 1924, she conducts sail-training programs for high school and college students.



Inland Seas – U.S. – 80' long – see above.



Larinda – U.S. – 86' long – designed and built over a thirty-year period as a modified replica of a 1767 Boston schooner; used for chartering and shown at many antique and classic boat shows.

Madeline – U.S. – 92' long – see above.

Mist of Avalon – Canada - 100' - see above.

U.S. Brig Niagara – U.S. - see previous.

Nina – U.S. – 92' long – replica of the three-masted carval, which was the smallest ship of the Columbus fleet.

Norfolk Rebel – U.S. – 59' long – a one-of-a-kind utility vessel, providing towing, fishing cargo carrying and salvage capabilities.

Pathfinder – Canada – 72' long – brigandine used for sail training

Pierius Magnus - 38' long - this specialty sail craft is called a schonker – a traditional Dutch tall ship designed to carry cargo in shallow waters; it was built at the Michigan Maritime Museum in South Haven, Michigan and will be conducting its maiden voyage this summer.

Playfair – Canada – 72' long – sail trainer.



Pride of Baltimore II – U.S. – 170' long – This topsail schooner, built in 1988 on the lines of the ***Baltimore Clipper***; she is on a goodwill tour representing Maryland and the city of Baltimore.

Red Witch – U.S. – 77' long – see above.

Road to the Isles – Canada – 71' long.

Royaliste – Canada – 76'; square topsail ketch.

St. Lawrence II – Canada – 72' – see above.



St. Paul

St. Paul – Russia - 50' long – this unique replica of the sailing vessel used by Commodore Vitus Jonassen Bering, the great Russian explorer who discovered Alaska in 1741; she is on a goodwill tour representing her homeland.

HMS Tecumseth – Canada – 124' long – see above.

True North (of Toronto) – Canada – 118' long – see above.

Windy II – 140' long – four-masted barquentine.

Schedule for the Tall Ships Great Lakes Challenge 2001

Kingston Tall Ships Challenge - Kingston, Ontario – June 28 to July 1, 2001

Tall Ships Challenge Port Colborne - Port Colborne, Ontario – July 5-8, 2001

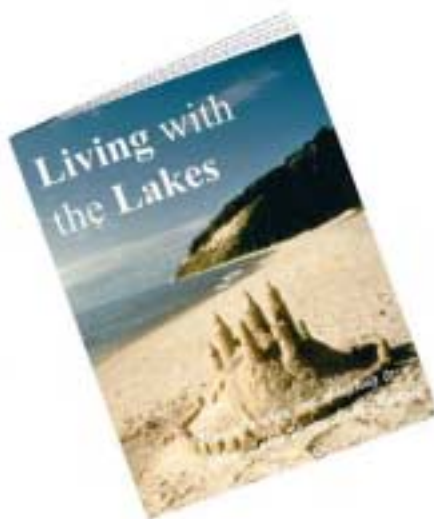
Cleveland Harborfest Welcomes the Tall Ships Challenge - Cleveland, Ohio – July 11-16, 2001

Detroit 300 and Sail Detroit – Detroit, Michigan and Windsor, Ontario – July 19-22, 2001

Tall Ships Celebration: Bay City – Bay City, Michigan – July 26-30, 2001

Tall Ship Challenge Muskegon 2001, Muskegon, Michigan – August 10-12, 2001

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